

R-state-var-init-compat^{11,40}

$\forall i:\text{Id}, ds:x:\text{Id} \text{ fp} \rightarrow \text{Type}, da:k:\text{Knd} \text{ fp} \rightarrow \text{Type}, x:\text{Id}, T:\text{Type}, v:T, ks:(\text{Knd List}),$
 $tr:(k:\{k:\text{Knd} \mid (k \in ks)\} \rightarrow \text{State}(ds) \rightarrow \text{Valtype}(da;k) \rightarrow T \rightarrow T).$
 $(\neg(\uparrow x \in \text{dom}(ds)))$
 $\Rightarrow (\forall A:\text{Realizer}.$
 $\text{R-Feasible}(A)$
 $\Rightarrow (\neg(\uparrow \text{R-occurs}(A;i;x)))$
 $\Rightarrow ds \parallel \text{R-ds}(A;i)$
 $\Rightarrow da \parallel \text{R-da}(A;i)$
 $\Rightarrow (\forall k \in ks. (\uparrow \text{isrcv}(k)) \Rightarrow (\text{R-da}(A;\text{source}(\text{lnk}(k)))(k)?\text{Void} \subseteq_r \text{Valtype}(da;k)))$
 $\Rightarrow (\forall k \in ks. \uparrow k \in \text{dom}(da))$
 $\Rightarrow (\forall k:\text{Knd}. (k \in ks) \Rightarrow (\neg(\uparrow \text{write-restricted}(A;i;k))))$
 $\Rightarrow (\forall y:\text{Id}. (\uparrow y \in \text{dom}(ds \oplus x : T)) \Rightarrow (\neg(\uparrow \text{read-restricted}(A; i; y))))$
 $\Rightarrow \text{R-state-var-init}(i;ds;da;x;T;v;ks;tr) \parallel A$